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**Title :** Diurnal behavior of dusky dolphin groups in Kaikoura, New Zealand

**Category :** Behavior

**Student :** Doctoral

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**Abstract :** In Kaikoura, New Zealand, dusky dolphins (*Lagenorhynchus obscurus*) feed mainly at night on small squid and lanternfishes associated with the deep scattering layer in and near the Kaikoura Canyon and its associated Hikurangi Trench. This leaves time free during the day for rest and social activities, generally closer to shore and in non-canyon waters. Dusky dolphin diurnal behavior was examined in Kaikoura in 1997-2000, using a combination of focal group interval sampling and digital video analysis. Large assemblages numbering hundreds, as well as smaller mating groups and mother-calf nurseries, were monitored. Noisy leaps accounted for the highest proportion of aerial activity in large groups, perhaps acting as a long-range signal. Large groups engaged in traveling (sustained linear movement) more frequently, and maintained a larger mean distance between individuals, than smaller groups. While mating occurred year-round, it was most often observed during the summer estrous season in small groups, with a median composition of 6 males and a single female. These small mating groups were characterized by high speed chasing of the female by the males, accompanied by frequent changes in direction and headfirst re-entry leaps. Quickness rather than aggression appeared most important in determining which males mated with the female. Calving occurred seasonally, peaking during the late spring-early summer months (November-December). Mother-calf nurseries, comprised of a median 10 adults and 3 calves, spent more time resting and engaged in less leaping activity than other dolphin groups. Nursery groups often occurred in especially shallow near-shore waters, and at times associated with Hector's dolphins (*Cephalorhynchus hectori*). Nursery groups likely provide protection from predators and conspecific harassment for mothers and their calves. Therefore, dusky dolphin groups provide a variety of social and reproductive functions, in addition to safety in numbers, during non-feeding daylight hours in Kaikoura.